

HCV Molecular Immunology: Maps of MAb Locations Plotted by Protein

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February 15, 2007

The names of MAbs and the location of well characterized linear binding sites of 21 amino acids or less are indicated relative to the protein sequences of the H77 clone. This map is meant to provide the relative location of epitopes on a given protein, but the H77 sequence may not actually bind to the MAb of interest, as it may vary relative to the sequence for which the epitope was defined. Above each linear binding site, the MAb name is given followed by the species in parentheses. Human is represented by 'h', non-human primate by 'p', mouse by 'm', and others by 'o'. More precise species designations for any given MAb can be found using the web search interface.

1 Core Ab Epitope Map

Figure 1: Core Ab Map 1, aa 1-50

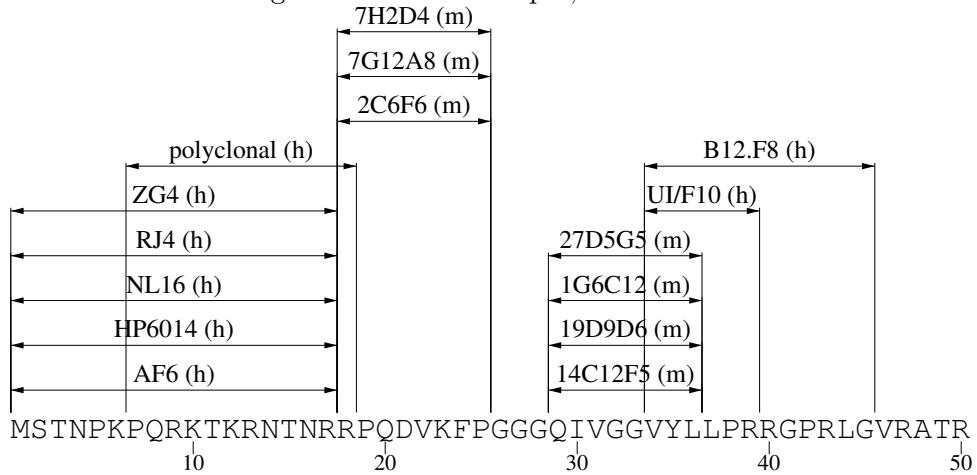


Figure 2: Core Ab Map 2, aa 51-100

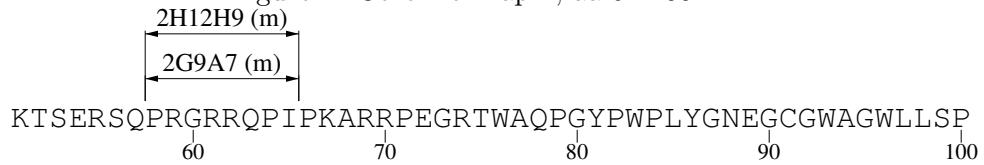


Figure 3: Core Ab Map 3, aa 101-150

RGSRPSWGPTDPRRRSRNLGKVIDTLTCGFADLMGYIPLVVGAPLGGAARA
110 120 130 140 150

Figure 4: Core Ab Map 4, aa 151-191

LAHG160 G170 V180 R190 RVLEDGVNYATGNLPGCSFSIFLLALLSCLTVPASA

2 E1 Ab Epitope Map

Figure 5: E1 Ab Map 1, aa 192-241

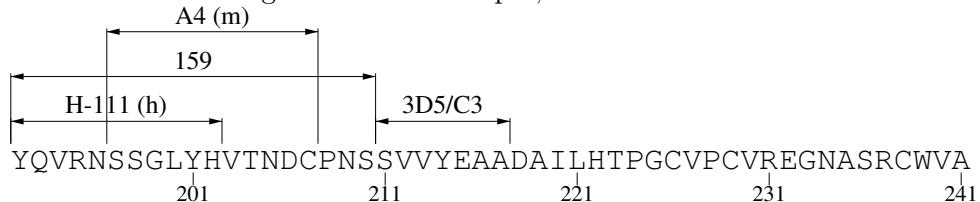


Figure 6: E1 Ab Map 2, aa 242-291

VTPTVATRDGKLPTTQLRRHIDLLVGSATLCSALYVGDLCGSVFLVGQLF
251 261 271 281 291

Figure 7: E1 Ab Map 3, aa 292-341

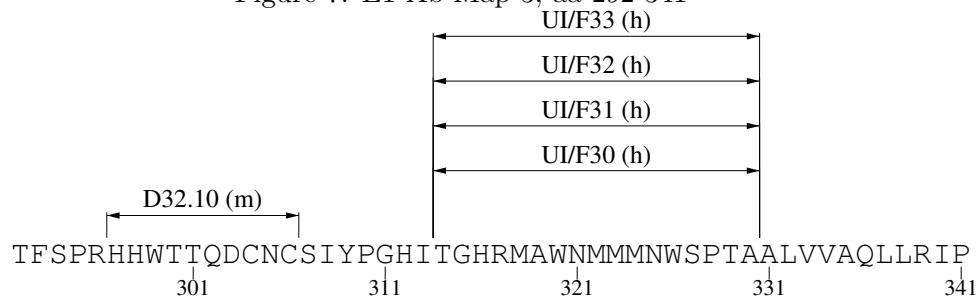


Figure 8: E1 Ab Map 4, aa 342-383

QAIMDDMIAGAHGVLAGIKYFSMVGNWAKVLVVVLLFAGVDA
351 361 371 381

3 E2 Ab Epitope Map

Figure 9: E2 Ab Map 1, aa 384-433

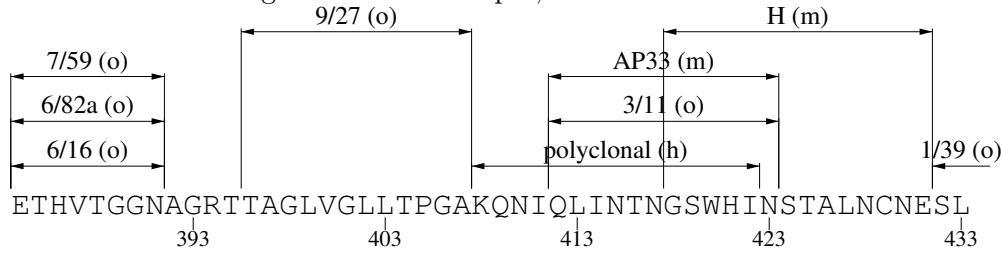


Figure 10: E2 Ab Map 2, aa 434-483

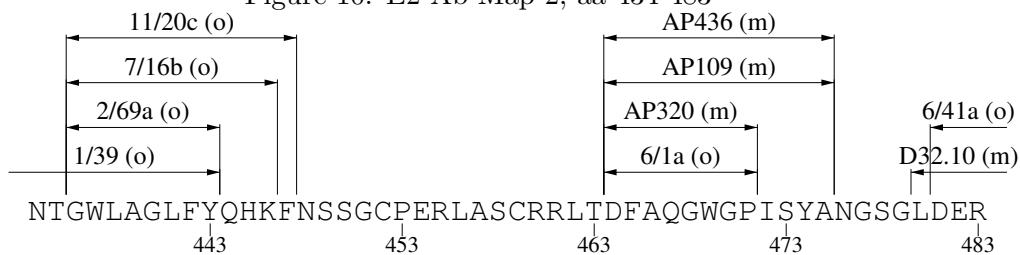


Figure 11: E2 Ab Map 3, aa 484-533

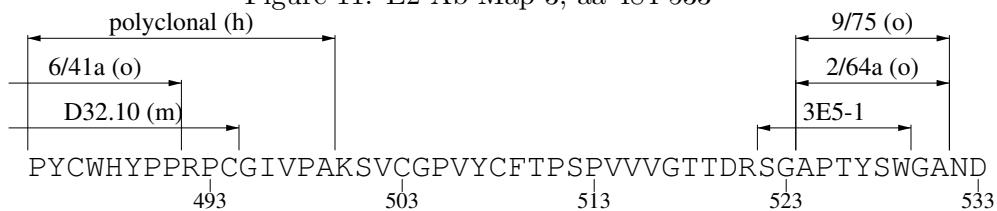


Figure 12: E2 Ab Map 4, aa 534-583
6/53 (o)

TDVFVNNTRPPLGNWFGCTWMNSTGFTKVC^GAPPCVIGGVGNNTLLCPT
543 553 563 573 583

Figure 13: E2 Ab Map 5, aa 584-633

DCFRKYPEATYSRCGSGPRI^TPRCMVDY^PYRLWHYPCTINYTI^FKVRMYV
593 603 613 623 633

Figure 14: E2 Ab Map 6, aa 634-683
ALP1 (m)

GGVEHRLEAACNWTRGERCDLEDRDRSELSP^LLLSTTQWQLPCSFTTL^P
643 653 663 673 683

AP266 (m)
ALP11 (m)
ALP98 (m)

Figure 15: E2 Ab Map 7, aa 684-733

ALSTGLIHLHQNI^DVQYL^YVGSSIASWA^IKWEYVVLLF^LLLADARVCS
693 703 713 723 733

Figure 16: E2 Ab Map 8, aa 734-746

CLWM^MLLISQAEA
743

4 p7 Ab Epitope Map

Figure 17: p7 Ab Map 1, aa 747-796

ALENLVILNAASLAGTHGLVSFLVFFCFAWYLKGRWVPGAVYALYGMWPL
756 766 776 786 796

Figure 18: p7 Ab Map 2, aa 797-809

LLLLLALPQRAYA
806

5 NS2 Ab Epitope Map

Figure 19: NS2 Ab Map 1, aa 810-859

LDTEVAASCGGVVLVGLMALTLSPYYKRYISWCMWWLQYFLTRVEAQLHV
819 829 839 849 859

Figure 20: NS2 Ab Map 2, aa 860-909

WVPPLNVRGGRDAVILLTCVVHPALVFDITKLLAIFGPLWILQASLLKV
869 879 889 899 909

Figure 21: NS2 Ab Map 3, aa 910-959

PYFVRVQGLLRICALARKIAGGHYVQMAIIIKLGALTGTCVYNHLAPLRDW
919 929 939 949 959

Figure 22: NS2 Ab Map 4, aa 960-1009

AHNGLRDLAVAVEPVVF⁹⁶⁹SRMETKLITWGADTAACGDI⁹⁷⁹INGLPVSARRGQE⁹⁸⁹
⁹⁹⁹1009

Figure 23: NS2 Ab Map 5, aa 1010-1026

ILLGPADGMVSKGWRLL
1019

6 NS3 Ab Epitope Map

Figure 24: NS3 Ab Map 1, aa 1027-1076

APITAYAQQT¹⁰³⁶RGLLGCI¹⁰⁴⁶ITS¹⁰⁵⁶TGRDKNQVEGEVQIVSTATQTFLATCING¹⁰⁶⁶¹⁰⁷⁶

Figure 25: NS3 Ab Map 2, aa 1077-1126

VCWT¹⁰⁸⁶VHGAGTRTIASPKGPVIQTYTNVDQDLVGWPAPQGSRS¹¹¹⁶LTPCTCG¹¹²⁶

Figure 26: NS3 Ab Map 3, aa 1127-1176

SSDLYLVTRHAD¹¹³⁶IPVRRRGDSRG¹¹⁴⁶SLLSPRPISY¹¹⁵⁶YLKGSSGGPLL¹¹⁶⁶CPTGHA¹¹⁷⁶

Figure 27: NS3 Ab Map 4, aa 1177-1226

VGLFRAAVCTRGVAKAVDFIPVENLETTMRSPVFTDNSSPPAVPQSFQVA
 1186 1196 1206 1216 1226

Figure 28: NS3 Ab Map 5, aa 1227-1276

HLHAP TGSGKSTKVPAAYAAKGYKVLVLPNSVAATLGFGAYMSKAHGVDP
1236 1246 1256 1266 1276

Figure 29: NS3 Ab Map 6, aa 1277-1326

NIRGVRTITGSPITYSTYGKFLADAGCSGGAYDIIICDECHSTDATSI
1286 1296 1306 1316 1326

Figure 30: NS3 Ab Map 7, aa 1327-1376

SGIGTVLDQAEATAGARLVLATATPPGSVTVSHPNIEEVALSTTGEIPFY

 1336 1346 1356 1366 1376

Figure 31: NS3 Ab Map 8, aa 1377-1426

ZX10 (m) →
GKAIPLEVIKGGRHLIFCHSKKKCDELAAKLVALGINAVAYYRG LDVSI
1386 1396 1406 1416 1426

Figure 32: NS3 Ab Map 9, aa 1427-1476



Figure 33: NS3 Ab Map 10, aa 1477-1526

LPQDAVSRTQRGGRTGRGKPGIYRFVAPGERPSGMFDSSVLCECYDAGCA
1486 1496 1506 1516 1526

Figure 34: NS3 Ab Map 11, aa 1527-1576

WYELTPAETTVRLRAYMNTPGLPVCQDHGFWEGVFTGLTHIDAHFLSQ
1536 1546 1556 1566 1576

Figure 35: NS3 Ab Map 12, aa 1577-1626

KQSGENFPYLVAYQATVCARAQAPPSWDQMRKCLIRLKPTLHGPTPLLY
1586 1596 1606 1616 1626

Figure 36: NS3 Ab Map 13, aa 1627-1657

RLGAVQNEVTLTHPITKYIMTCMSADLEVVT
1636 1646 1656

7 NS4a Ab Epitope Map

Figure 37: NS4a Ab Map 1, aa 1658-1707

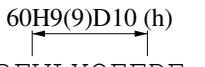
STWVLVGGVLAALAAAYCLSTGCVVIVGRIVLSGKPAIIPDREVLYQEFDE
1667 1677 1687 1697 1707


Figure 38: NS4a Ab Map 2, aa 1708-1711

MEEC
1711

8 NS4b Ab Epitope Map

Figure 39: NS4b Ab Map 1, aa 1712-1761

SQHLPYIEQGMMLAEQFKQKALGLLQTASRHAEVITPAVQTNWQKLEVFW
1721 1731 1741 1751 1761

Figure 40: NS4b Ab Map 2, aa 1762-1811

AKHMWNFISGIQYLAGLSTLPGNPAIASLMAFTAATSPPLTGQTLLFNI
1771 1781 1791 1801 1811

Figure 41: NS4b Ab Map 3, aa 1812-1861

LGGWVAAQLAAPGAATAFVGAGLAGAALDSVGLGKVLVDILAGYGAGVAG
1821 1831 1841 1851 1861

Figure 42: NS4b Ab Map 4, aa 1862-1911

ALVAFKIMSGEV^PSTEDLV^NLPA^ILSPGALAVGVVFAS^ILRRRVGP^GE^G
1871 1881 1891 1901 1911

Figure 43: NS4b Ab Map 5, aa 1912-1961

AVQWMNRLIAFASRGNHVS^PTHYVPESDAAARVTAI^LSSLTVTQLLRR^LH
1921 1931 1941 1951 1961

Figure 44: NS4b Ab Map 6, aa 1962-1972

QWISSECTTPC
1971

9 NS5a Ab Epitope Map

Figure 45: NS5a Ab Map 1, aa 1973-2022

SGSWLRLDIWDWICEVLSDFKTLKAKLMPQLPGIPFVSCQRGYRGVWRGD
1982 1992 2002 2012 2022

Figure 46: NS5a Ab Map 2, aa 2023-2072

GIMHTRCHCGAEITGHVKNGTMRIVGPRCKNMWSGTFFINAYTTGPCTP
2032 2042 2052 2062 2072

Figure 47: NS5a Ab Map 3, aa 2073-2122

LPAPNYKFALWRVSAEYVEIRRVDHYVSGMTTDNLKCPCQIPSPEFF
2082 2092 2102 2112 2122

Figure 48: NS5a Ab Map 4, aa 2123-2172

TELDGVRLHRFAPPCKPLLREEVSFRVGLHEYPVGSQQLPCEPEPDVAVL
2132 2142 2152 2162 2172

Figure 49: NS5a Ab Map 5, aa 2173-2222

SMLTDPSHITAEAAAGRRLLARGSPPSMASSASQLSAPSLKATCTANHDSP
2182 2192 2202 2212 2222

Figure 50: NS5a Ab Map 6, aa 2223-2272

DAELIEANLLWRQEMGGNITRVESENKVVIILDSFDPLVAEEDEREVSVPÅ
2232 2242 2252 2262 2272

Figure 51: NS5a Ab Map 7, aa 2273-2322

EILRKSRRFAPALPVWARPDYNPPLLVTWKKPDYEPVVHGCPPLPPRSP
2282 2292 2302 2312 2322

Figure 52: NS5a Ab Map 8, aa 2323-2372

PVPPPRKKRTVVLTESTLPTALAELATKSFGSSSTSGITGDNTTSSEPA
2332 2342 2352 2362 2372

Figure 53: NS5a Ab Map 9, aa 2373-2420

PSGCPPDSDVESYSSMPPLEGEPEGDPDLSDGSWSTVSSGADTEDVVCC
2382 2392 2402 2412

10 NS5b Ab Epitope Map

Figure 54: NS5b Ab Map 1, aa 2421-2470

SMSYSWTGALVTPCAEEQKLPINALSNSLLRHHLVYSTTSRSACQRKK
2430 2440 2450 2460 2470

Figure 55: NS5b Ab Map 2, aa 2471-2520

KVTFDRLQVLDHYQDVLKEVKAAASKVKANLLSVEEACSLAPPHSAKSK
2480 2490 2500 2510 2520

Figure 56: NS5b Ab Map 3, aa 2521-2570

FGYGAKDVRCHARKAVAHINSVWKDLLEDSVTPIDTTIMAKNEVFCVQPE
2530 2540 2550 2560 2570

Figure 57: NS5b Ab Map 4, aa 2571-2620

KGGRKPARLIVFPDLGVRVCEKMALYDVVSKLPLAVMGSSYGFQYSPGQR
2580 2590 2600 2610 2620

Figure 58: NS5b Ab Map 5, aa 2621-2670

VEFLVQAWKSKKTPMGLSYDTRCFDSTVTESDIRTEEAIYQCQCDLDPQAR
2630 2640 2650 2660 2670

Figure 59: NS5b Ab Map 6, aa 2671-2720

VAIKSLTERLYVGGPLTNSRGENGCGYRRCRASRVLTTCGNTLTRYIKAR
2680 2690 2700 2710 2720

Figure 60: NS5b Ab Map 7, aa 2721-2770

AACRAAGLQDCTMLVCGDDLVVICESAGVQEDAASLRAFTEAMTRYSAPP
2730 2740 2750 2760 2770

Figure 61: NS5b Ab Map 8, aa 2771-2820

GDPPQPEYDLELITSCSSNVSAHDGAGKRVYYLTRDPTTPLARAAWETA
5B-3B1 (m)
2780 2790 2800 2810 2820

Figure 62: NS5b Ab Map 9, aa 2821-2870

RHTPVNSWLGNIMFAPTLWARMILMTHFFSVLIARDQLEQALNCEIYGA
2830 2840 2850 2860 2870

Figure 63: NS5b Ab Map 10, aa 2871-2920

CYSIEPLDLPIIQRLHGLSAFSLHSYSPGEINRVAACLRKLGVPPPLRAW
2880 2890 2900 2910 2920

Figure 64: NS5b Ab Map 11, aa 2921-2970

RHRAWSVRARLLARGGKAAICGKYLFNWAVRTKLKLTPITAAGRLLSGW
2930 2940 2950 2960 2970

Figure 65: NS5b Ab Map 12, aa 2971-3011

FTAGYSGGDIYHSVSHARPRWFWFCLLLAAGVGIYLLPNR
2980 2990 3000 3010